





## **Lawrence Berkeley National Laboratory**





## **About Berkeley Lab**

Berkeley Lab is a U.S. Department of Energy (DOE) national laboratory that conducts a wide variety of unclassified scientific research for DOE's Office of Science. Located in Berkeley, California, Berkeley Lab is managed by the University of California, and the director is Dr. Paul Alivisatos.

## **Bringing Science Solutions to the World**

Berkeley Lab is an incubator for ideas, innovations and products that help society and explain how the universe works:

- renewable energy sources such as biofuels and artificial photosynthesis
- energy efficiency at home, at work, and around the world
- the ability to observe, probe, and assemble materials atom by atom
- climate change research, environmental science, and the growing connections between them
- the chemistry and physics of matter and force in the universe from the infinite to the infinitesimal
- computational science and advanced networking to enable discovery and remote collaborations
- biological sciences for human health and energy research.

Berkeley Lab was founded in 1931 by Ernest Orlando Lawrence, a UC Berkeley physicist who won the 1939 Nobel Prize in physics for his invention of the cyclotron, a circular particle accelerator that opened the door to high-energy physics. It was Lawrence's belief that scientific research is best done through teams of individuals with different fields of expertise, working together. His teamwork concept is a Berkeley Lab legacy that continues today.

Eleven scientists associated with Berkeley Lab have won the Nobel Prize, and dozens of Nobel Laureates have either trained at the Lab or had significant collaborations with staff there. Thirteen Lab scientists have won the National Medal of Science, our nation's highest award for lifetime achievement in scientific research.

Researchers at Berkeley Lab have...discovered 16 elements...identified good and bad cholesterol...turned windows into energy savers...found the source of large-scale structure in the universe and revealed the existence of dark energy...explained photosynthesis...exposed the risk of radon... redefined the causes of breast cancer...made appliances pull their weight in energy efficiency...revealed the secrets of the human genome...and more!

	The Lab at a Glance
11	Nobel Laureates
\$700 million	Annual contribution to local economy
\$1.6 billion	Impact on U.S. economy
4,200	Employees, including:
1,685	Scientists, engineers, and faculty
475	Postdoctoral fellows
560	Undergraduate and graduate student employees
	Lab Budget

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FY 2011	\$853 million (est.) \$728 million + \$125 million (ARRA)
FY 2010	\$811 million \$707 million + \$104 million (ARRA)
FY 2009	\$648 million \$637 million + \$ 11 million (ARRA)
FY 2008	\$590 million
(ARRA = American Recovery and Reinvestment Act)	

Berkeley Lab hosts six major national user facilities that attract more than 7,000 visitors a year to conduct joint research, run experiments,

and analyze sample materials:

Advanced Light Source

**Energy Sciences Network** 

Joint Genome Institute

Molecular Foundry

National Center for Electron Microscopy

National Energy Research Scientific Computing Center